



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION I

5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MASSACHUSETTS 02109-3912

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

**JUL 05 2011**

Donald A. Robinson, Director  
Environmental Health and Safety  
Draper Hall  
University of Massachusetts  
40 Campus Center Way  
Amherst, Massachusetts 01003-9244

Re: PCB Decontamination and Disposal Approval under 40 CFR § 761.61(c) and  
§ 761.79(h)  
Webster House  
University of Massachusetts, Amherst, Massachusetts

Dear Mr. Robinson:

This is in response to the University of Massachusetts (UMass) Notification<sup>1</sup> for approval of a proposed plan to address PCB contamination at the building known as Webster House (the Site) located within the Orchard Hill Residential area on the UMass Campus, in Amherst, Massachusetts. The Site contains PCB-contaminated materials that exceed the allowable PCB levels under 40 CFR § 761.20(a) and § 761.62. Specifically, PCBs with greater than or equal to ( $\geq$ ) 50 parts per million (ppm) have been found in the following:

- Exterior and interior caulk on the First Floor Storefront windows
- Interior caulk on the Elevator Hall windows

UMass has requested an approval under 40 CFR § 761.61(c) that includes the following activities:

- o Remove and dispose of PCB caulk with  $\geq$ 50 ppm in a TSCA approved or hazardous waste landfill;

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<sup>1</sup> The notification was prepared by Woodard & Curran on behalf of the UMass to satisfy the requirements under 40 CFR § 761.61(c) and § 761.79(h). Information was submitted dated March 31, 2011 (PCB Remediation Plan) and June 10, 2011 (Response to Comments). These submittals shall be referred to as the "Notification".



- Remove *non-porous surfaces* (e.g., metal window frames), in direct contact with PCB caulk, and PCB-contaminated *porous surfaces* (i.e., stucco) to a minimum distance of 5 inches from the PCB caulk, and dispose of as a  $\geq 50$  ppm waste in a TSCA approved or hazardous waste landfill; and,
- Encapsulate PCB-contaminated *porous surfaces* (e.g., concrete and slate) with two coats of epoxy coating and continuous metal flashing.

In the event that the stucco overhang ceiling cannot be decontaminated to the PCB cleanup standard of less than or equal to ( $\leq$ ) 1 ppm, UMass is proposing to encapsulate these surfaces. If encapsulation is implemented, UMass will be required to include these encapsulated surfaces in the deed restriction and in the long-term monitoring and maintenance implementation plan (MMIP) (See Attachment 1, Conditions 15 and 16).

UMass has determined that glazing sealants and certain caulk, which have PCB concentrations at less than ( $<$ ) 50 ppm are *Excluded PCB Products*. Under the PCB regulations, *Excluded PCB Products* are authorized for use and thus there is no requirement for removal of these building materials or for decontamination of surfaces that are in contact with these building materials. However, as indicated in the Notification, these materials have been determined to be asbestos containing materials (ACM) and as such, they will be removed and disposed of as an ACM/PCB waste.

Based on the EPA's review, the information provided in the Notification meets the requirements under § 761.62(a) and § 761.79(h) for abatement of PCB caulk and § 761.61(c) for encapsulation of the *porous surfaces*. EPA finds that the proposed encapsulation of PCB contaminated *porous surfaces* should effectively prevent direct exposure of these PCB contaminated *porous surfaces* to building users provided the physical barriers are maintained. As such, EPA may approve the encapsulation under § 761.61(c).

UMass may proceed with its project in accordance with 40 CFR § 761.61(c); § 761.62(a); § 761.79(h); its Notification; and, this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its rights to require additional investigation or mitigation measures should EPA determine that the encapsulation is not effective in eliminating exposure to PCBs.

Please note that UMass will be required to record a notation on the deed as required under § 761.61(a)(8) since PCBs at greater than ( $>$ ) 1 ppm will remain on the Site.

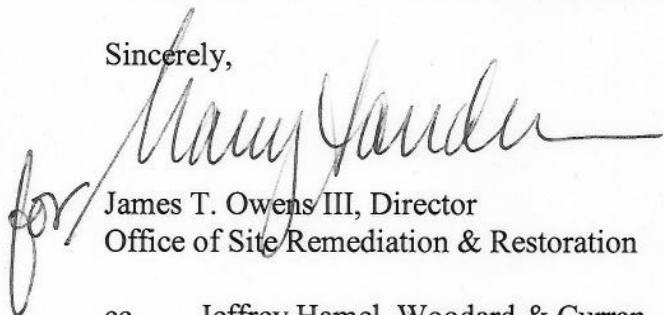


Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)  
United States Environmental Protection Agency  
5 Post Office Square, Suite 100  
Boston, Massachusetts 02109-3912  
Telephone: (617) 918-1527  
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

for

James T. Owens III, Director  
Office of Site Remediation & Restoration

cc Jeffrey Hamel, Woodard & Curran  
MassDEP – Western Region  
File

Attachment 1 – PCB Approval Conditions

Attachment 2 – *Standard Operating Procedure For Sampling Porous Surfaces For Polychlorinated Biphenyls (PCBs), Rev. 4, May 5, 2011*



**ATTACHMENT 1:**

**PCB DECONTAMINATION AND DISPOSAL APPROVAL CONDITIONS  
WEBSTER HOUSE (the Site)  
UNIVERSITY OF MASSACHUSETTS  
AMHERST, MASSACHUSETTS**

**GENERAL CONDITIONS**

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the Site and identified in the Notification.
2. The University of Massachusetts (UMass) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. UMass must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, UMass shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. UMass is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time UMass has or receives information indicating that UMass or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by UMass are authorized to conduct the activities set forth in the Notification. UMass is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.





8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release UMass from compliance with any applicable requirements of federal, state or local law; or 3) release UMass from liability for, or otherwise resolve any violations of federal, state or local law.

### **NOTIFICATION AND CERTIFICATION CONDITIONS**

9. This Approval may be revoked if the EPA does not receive written notification from UMass of its acceptance of the conditions of this Approval within 10 business days of receipt.
10. UMass shall submit the following information for EPA review and/or approval:
- a. A certification signed by its selected abatement/demolition contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
  - b. A contractor work plan, prepared and submitted by the selected demolition or abatement contractor(s) describing the containment and air monitoring that will be employed during abatement activities. This work plan should also include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated; and,
  - c. A certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval.

### **DECONTAMINATION AND DISPOSAL CONDITIONS**

11. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.
12. The decontamination standard for *porous surfaces* (i.e. stucco) shall be less than or equal to ( $\leq$  1 part per million (ppm) PCBs.



- a. All post-cleanup verification sampling for *porous surfaces* shall be performed on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Verification sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches, and in accordance with the frequency specified in the Notification.
  - b. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q.
  - c. In the event that *porous surfaces* (i.e. stucco) cannot be decontaminated to the standard of  $\leq 1$  ppm, the encapsulation alternative, as described in the Notification shall be implemented. If this alternative is implemented, UMass will be required to include the encapsulated areas in the deed restriction and in the long-term monitoring and maintenance implementation plan (MMIP) (Conditions 15 and 16, respectively).
13. Following encapsulation of PCB-contaminated *porous surfaces*, post-encapsulation sampling shall be conducted to determine the effectiveness of the encapsulation.
- a. Wipe sampling of encapsulated surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e.  $\mu\text{g}/100\text{ cm}^2$ ). Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
  - b. In the event that any wipe sample PCB concentration is greater than ( $>$ )  $1\ \mu\text{g}/100\text{ cm}^2$ , UMass shall contact EPA for further discussion and direction on alternatives.
14. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
- a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
  - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).



- c. PCB-contaminated water generated during decontamination or dewatering shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

### **DEED RESTRICTION AND USE CONDITIONS**

- 15. Within thirty (30) days of completing the activities described in the Notification and in the Approval, UMass shall submit for EPA review and approval, a draft deed restriction for the Site. The deed restriction shall include: a description of the extent and levels of contamination at the Site following abatement; a description of the actions taken at the Site; a description of the use restrictions for the Site; and the long-term monitoring and maintenance requirements on the Site. Within seven (7) days of receipt of EPA's approval of the draft deed restriction, UMass shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.

### **INSPECTION, MODIFICATION AND REVOCATION CONDITIONS**

- 16. Within 60 days of completion of the work authorized under this Approval, UMass shall submit for EPA's review and approval, a detailed monitoring and maintenance implementation plan (MMIP) for the surface barriers. UMass shall incorporate any changes to the MMIP required by EPA.
  - a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and, reporting requirements, as applicable.
  - b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, including parents, students, other on-site workers, and interested stakeholders.
  - c. The MMIP also shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the barriers encapsulating the PCB-contaminated surfaces.
  - d. UMass shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the barriers.
  - e. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.





17. UMass shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by UMass to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
18. Any modification(s) in the plan, specifications, or information submitted by UMass, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. UMass shall inform the EPA of any modification, in writing, at least ten (10) days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification.
19. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from UMass to make a determination regarding potential risk.
20. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

#### **RECORDKEEPING AND REPORTING CONDITIONS**

21. UMass shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the decontamination and disposal and the analytical sampling shall be established and maintained by UMass in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
22. As required under Condition 16 of this Approval, UMass shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.
23. UMass shall submit a final report (both hard copy and electronic copy) to the EPA within 90 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of and the size of





the PCB cleanup area(s); copies of manifests and bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer. The Report shall also include a copy of the recorded deed restriction and a certification signed by a UMass official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.

24. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator  
United States Environmental Protection Agency  
5 Post Office Square, Suite 100 – (OSRR07-2)  
Boston, Massachusetts 02109-3912  
Telephone: (617) 918-1527  
Facsimile: (617) 918-0527

25. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

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**END OF ATTACHMENT 1**

